



SIERRA CLUB

September 2, 2020

Via electronic delivery

The Honorable Jocelyn Boyd
Chief Clerk/Executive Director
The Public Service Commission of South Carolina
101 Executive Center Drive
Columbia, South Carolina 29210

Re: Application of Dominion Energy South Carolina, Incorporated for Adjustment of Rates and Charges
Docket No. 2020-125-E
Sierra Club's First Set of Data Requests

Dear Ms. Boyd,

On behalf of Robert Guild, please find enclosed for filing in the above-referenced case Sierra Club's first set of data requests. This request was filed today via the South Carolina Public Service Commission Case E-Filing System. As indicated on the Certificate of Service, I am serving all parties of record via electronic mail.

Please contact me with any questions.

Sincerely,



on behalf of

Robert Guild
S.C. Bar No. 2358
314 Pall Mall Street
Columbia, SC 29201
(803) 916-5738
bguild@mindspring.com

Enclosure

cc: Certificate of Service

BEFORE
THE PUBLIC SERVICE COMMISSION OF
SOUTH CAROLINA
DOCKET NO. 2020-125-E

In re:

Application of Dominion Energy South
Carolina, Incorporated for Adjustment
of Rates and Charges (See Commission
Order No.2020-313)

**SIERRA CLUB’S FIRST SET OF
DATA REQUESTS
September 2, 2020**

Pursuant to R.103-833 of the South Carolina Code of Regulations, Intervenor Sierra Club, by and through undersigned counsel, serves the following data requests on Dominion Energy South Carolina, Inc. (“Dominion” or the “Company”) in the above referenced docket. These requests are continuing in nature to the extent permitted by the rules of the South Carolina Public Service Commission and the South Carolina Rules of Civil Procedure.

INSTRUCTIONS

1. These requests should be regarded as continuing. If, after filing its initial response to the interrogatories and requests, the Company becomes aware of any information that would alter or amend any responses, please provide updated responses as additional information becomes available.
2. If a response to any of the attached requests requires any calculations, analyses, assumptions, or studies, please identify and provide copies of such calculations, analyses, assumptions, or studies—including all work papers relating thereto. For any analyses or calculations prepared

using electronic workbooks, please provide operational versions of those spreadsheets as well as all operational versions of all supporting workbooks used to develop inputs.

3. Produced documents should include originals and all other copies which are not absolutely identical as well as all drafts and notes (whether typed, handwritten or otherwise) made or prepared in connection with such documents, whether used or not.
4. With respect to requests for analyses or calculations that were prepared using electronic workbooks, please provide operational versions of those spreadsheets (i.e., with calculations active) as well as all operational versions of all supporting workbooks used to develop inputs.
5. Unless otherwise specified, all requests for documents herein pertain to the Company's South Carolina operations. Please ensure that all responses are specific to the Company's South Carolina service territory. Where South Carolina-specific data are not available, please provide an appropriate factor, method or percentage to allow for an accurate estimate of South Carolina-specific data to be performed.
6. If you consider any document to be privileged or protected from production, then you must:
 - (i) include in your response a list of documents withheld from production, (ii) identify each document by date, addressee, author, title and subject matter, (iii) identify those persons who have seen the document or who were sent copies, and (iv) state the ground(s) upon which each such document is considered privileged or protected.

7. Due to the current COVID-19 situation and most people working remotely, please deliver all responses to the following interrogatories and requests for production of documents

electronically to:

Robert Guild
bguild@mindspring.com

Dorothy E. Jaffe
dori.jaffe@sierraclub.org

DEFINITIONS

1. The “Company” is defined to include both the Dominion Energy South Carolina, Inc. and any consultants or other agents that assisted in the development or preparation of the plan for electric distribution grid transformation projects.
2. “Communications” shall mean all oral communications and all written communications, including all “documents,” as defined below.
3. “Describe” means to state in detail each and every basis for the position taken or the statement made in response to the request and includes identifying each and every statement or document relied on and provide a copy of all such identified documents.
4. “Document” is defined to include all materials, of any kind or description, in any medium, regardless of where or how maintained or accessed (such as in or through official work or personal files, accounts, or devices). Documents include, by way of illustration only, correspondences, papers (including working papers), electronic mail (including any attachments), telegrams, facsimiles, notes, sound or video recordings, voice mail, minutes, memoranda, inter- or intra-office communications, diaries, daily logs, records, reports, studies, estimates, surveys, written forecasts, analyses, contracts, licenses, agreements, charts, graphs, indexes, database or other electronic records, statistical records, data sheets,

data processing cards, computer printouts, computer discs, videotapes, motion pictures, agendas, meeting invitations, websites, intranet pages, and other electronic communications, any notes or drafts relating to any of the foregoing, and any other documents of any kind in your possession, custody or control or to which you have access or known to exist..

5. “Identify,” “identification,” as used with respect to a person means to state the person’s full name and present address and his present or last known employment position and business affiliation if a natural person, and corporate or other status and address if not a natural person. “Identify” or “identity” when used in reference to a document means to state the following as to each document:
 - a. Its nature and contents;
 - b. Its date;
 - c. The date it was executed if different from the date it bears;
 - d. The name, address and position of its author or signer;
 - e. The name, address and position of its addressee, if any;
 - f. Its present location and the name, present address and position of the person or persons having present custody; and
 - g. Whether it has been destroyed, and if so, with regard to such destruction; (i) the date of destruction; (ii) the reason for destruction; and (iii) the identity of the person who destroyed the document.
6. “Including” means “including but not limited to.”
7. “Person” includes any individual, sole proprietorship, partnership, corporation, association, trust, statutory trust, joint venture, or other entity.

8. “You” or “your” means Dominion Energy South Carolina and its agents, employees, representatives, attorneys, experts, investigators, insurers, consultants, or anyone acting on behalf of Dominion Energy South Carolina.

DATA REQUESTS

Request No. 1-1. Please provide copies of any interrogatories or other data requests or formal discovery requests served in this proceeding by the Company or any other party or intervenor, when that discovery request is served. If any data request has already been served, please provide a copy of the Company’s response to this request. Where available, please provide copies electronically in the native file format. This is an on-going request.

Request 1-2. Please provide copies of any and all responses (including objections) provided by the Company in this proceeding to any data request, interrogatory or request for the production of documents (including any informal request) that was served on the Company by any other party or intervenor. Please provide such response or objection whenever it is provided or amended. If any such response or objection has already been provided to any other party or intervenor, please provide that response or objection as part of the Company’s response to that request. Where available, please provide copies electronically in the native file format. This is an on-going request.

Request No. 1-3. For the Williams and Wateree coal plants, please identify the amount of money that the Company has included in its Test Period spending as proposed in this case, by the following types:

- a. Fixed operations and maintenance;
- b. Variable operations and maintenance;

- c. Capital;
- d. Fuel; and
- e. Other.

Request No. 1-4. For Williams and Wateree coal plants, please provide all documents that were relied on by the Company to calculate costs included in its Test Period estimate, including, without limitation, any:

- a. Maintenance schedules;
- b. Maintenance plans;
- c. Fuel contracts;
- d. Fuel cost forecasts; and
- e. Estimates of major capital expenses

Request No. 1-5. For each Test Period capital expenditure at the Williams and Wateree coal plants, please:

- a. Describe the reason for the expenditure.
- b. Identify whether the expenditure would be necessary if the plant were to retire prior to 2023. If the expenditure would still be necessary, explain why.
- c. Identify whether the expenditure would be necessary if the plant were to retire prior to 2025. If the expenditure would still be necessary, explain why.
- d. Identify whether the expenditure would be necessary if the plant were to retire prior to 2030. If the expenditure would still be necessary, explain why.

Request No. 1-6. For the Williams and Wateree coal plants, has the Company conducted any analyses of the economic viability, prudence, and/or net present value revenue requirements for customers of continuing to operate the unit?

- a. If not, please explain why not.
- b. If so, please identify the date and nature of each analysis.
- c. Please provide all reports or other documentation of the results of each analysis listed in response to subpart (b), and any supporting calculations, data, documents, modeling input and output files, and workpapers associated with each such analysis.

Request No. 1-7. For the Williams and Wateree coal plants:

- a. Please produce any unit replacement studies conducted by or for the Company.
- b. Identify any transmission grid updates or changes that would be needed to allow for the retirement of any of these units.
- c. Produce any analysis or assessment of the need for the continue operations of each unit.
- d. Provide the remaining book value (plant balance) at the start of 2019.
- e. Identify the current undepreciated book value, and the expected undepreciated book value for each year of the remaining operation life of each unit.
- f. Produce any analysis or assessment of the impact that retirement of each unit would have on capacity adequacy, transmission grid stability, transmission grid support, voltage support, or transmission system reliability.

Request No. 1-8. For the Williams and Wateree coal plants, please identify and produce:

- a. The most recent assessment of the condition and/or remaining life of the plant; and

- b. Any analysis or assessment conducted since 2015, of the economics of continued operation of the unit, i.e., a disposition/retirement study.

Request No. 1-9. For the Williams and Wateree coal plants:

- a. Confirm that the Company owns 100% of each of these units. If denied, identify the Company's ownership share of any co-owned unit(s); and the name of the current co-owners and their ownership percentages.
- b. Identify the estimated retirement date.
- c. Explain the basis for each retirement date that is identified.
- d. Please provide all supporting analyses, calculations, data, documents, modeling input and output files, and workpapers associated with or used in determining each retirement date.

Request No. 1-10. Please provide the following for the Company, with supporting workpapers (in electronic, machine-readable format):

- a. Annual peak load since 2010;
- b. Annual capacity reserve requirement since 2010;
- c. Annual sales since 2010;
- d. Annual generation since 2010;
- e. Annual off-system sales in GWs since 2010;
- f. Annual off system sales revenues in dollars since 2010; and
- g. Any sharing mechanism or provision for off-system sales revenue distribution.

Request No. 1-11. For the Williams and Wateree coal plants, please provide the following earliest available historical annual data for each unit separately:

- a. Installed capacity;
- b. Unforced capacity;
- c. Capacity factor;
- d. Availability;
- e. Heat rate;
- f. Forced or random outage rate;
- g. Fixed O&M;
- h. Non-fuel variable O&M;
- i. Fuel costs;
- j. Environmental capital costs;
- k. Non-environmental capital cost;
- l. Energy revenues;
- m. Capacity revenues;
- n. Ancillary services revenues;
- o. Any other revenues;
- p. Depreciation;
- q. Undepreciated net book value;
- r. Property taxes;
- s. Property insurance; and
- t. Projected retirement date, if any.

Request No. 1-12. Please provide the following earliest available historical hourly data through to the present day:

- a. Provide hourly system lambda (\$/MWh) or the marginal cost of energy for the Company as a whole.
- b. If different from (a), provide marginal cost of purchased power on an hourly basis.
- c. To the extent that the Company tracks any other form of internal or external market prices for energy as delivered to the Company's service territory, provide these costs in \$/MWh terms.
- d. Provide hourly net generation (MWh) by unit.
- e. Provide hourly production cost (\$/MWh) by unit.

Request No. 1-13. Please provide the following earliest available historical data through to the present day:

- a. Provide monthly production cost (\$/MWh) for each coal unit owned or operated by the Company, broken into categories of (at least, and as applicable) fuel cost, variable O&M, emissions cost, and any other separable categories, such that the sum of these categories adds up to the total cost. State if these costs are provided on a gross or net power basis.
- b. Provide annual fixed O&M costs for each coal unit owned or operated by the Company, broken into categories of (at least, and as applicable), labor, rents, taxes, major maintenance cycles, minor maintenance cycles, ongoing operational or maintenance costs.

Request No. 1-14. For the Williams and Wateree coal plants, please provide (1) hourly and (2) daily capacity factors (or energy production in MWh) for each unit separately, from earliest

available through the most recent time for which data are available. If those figures are not available, please confirm that, and then provide the requested data at the most granular unit of time available.

Request No. 1-15. For the Williams and Wateree coal plants, for each of the years 2019 through 2033, please identify the following for all resource plans identified in the Company's 2019 Integrated Resource Plan:

- a. Installed capacity;
- b. Unforced capacity;
- c. Capacity factor;
- d. Availability;
- e. Heat rate;
- f. Forced or random outage rate;
- g. Fixed O&M;
- h. Non-fuel variable O&M;
- i. Fuel costs;
- j. Environmental capital costs;
- k. Non-environmental capital cost;
- l. Energy revenues;
- m. Capacity revenues;
- n. Ancillary services revenues;
- o. Any other revenues;
- p. Depreciation;
- q. Undepreciated net book value;

- r. Property taxes;
- s. Property insurance; and
- t. Projected retirement date, if any.

Request No. 1-16. Please provide:

- a. All forecasts of future energy market prices through 2035;
- b. All forecasts of peak load and annual energy through 2035;
- c. All forecasts of fuel prices through 2035; and
- d. All forecasts of expected capital expenditures at Williams and Wateree coal plants through 2035.

Request No. 1-17. Please provide all peak load and annual demand forecasts for the last 10 years that have been prepared by or for the Company.

Request No. 1-18. With regard to load forecasts:

- a. Please provide the Company's projection of peak demand and internal load from 2018 through 2035, and the basis for that projection.
- b. Please describe the factors driving the Company's projection of future load, including any study or demand/load forecast that has been conducted along with any associated modeling files.
- c. Please provide the Company's weather-normalized peak demand and internal load by year for 2008 through 2019, and the corresponding compound annual rate of growth for each.
- d. Please provide your projection of internal load by major retail rate class by year through 2035.

- e. Please provide your projected energy and peak load requirement, broken down by sector, through 2035.

Request No. 1-19. Has the Company evaluated whether the Williams and Wateree coal plants will require additional investments to comply with final, proposed, or possible future environmental regulations including, but not limited to: existing consent decrees, new source review provisions, coal combustion residuals, effluent limitation guidelines, national ambient air quality standards, cooling water intake standards, the cross-state air pollution rule, the mercury and air toxics standards, regional haze, and carbon dioxide emissions?

- a. If not, please explain why not.
- b. If so, please provide a summary, organized by electric generating unit, briefly describing the additional investments, including the purpose, and capital and annual O&M costs of such investments.
- c. Please also include all supporting analyses, calculations, data, documents, modeling input and output files, and workpapers associated with each investment.

Request No. 1-20. Provide any internal planning documents or spreadsheets that discuss the Company's plans or options for early retirement of the Williams and Wateree coal plants.

Request No. 1-21. For the Williams and Wateree coal plants, provide the following information:

- a. Minimum down time
- b. Minimum up time
- c. Time from shut down to first power generation
- d. Ramp rates up and down

Request No. 1-22. For the Williams and Wateree coal plants, please provide the time frame over which the Company evaluates whether a unit's commitment decision maximizes a unit's economic value to customers.

Request No. 1-23. Has the Company conducted any analysis on switching its Williams and Wateree coal units to seasonal operations?

- a. If so, provide all such analyses in native, machine readable format.
- b. If not, please describe the extent to which the Company has considered such a switch
- c. If the Company has not considered a switch to seasonal operation, please explain, in detail, why.

Request No. 1-24. Regarding the Company's unit commitment decision process for the Williams and Wateree plants:

- a. Describe the Company's process for determining when to commit the coal units and operate them up to at least their minimum operation levels.
- b. Does the Company perform economic analyses to inform its unit commitment decisions?
 - i. If no, explain why not.
 - ii. If so, provide all such analyses conducted since 2015 in native, machine-readable format.

Request No. 1-25. Provide the Company's hourly load from earliest year available through most recent data available.

Request No. 1-26. Provide hourly generation at each of the Company's coal units earliest year available through most recent data available.

Request No. 1-27. Provide the hourly locational marginal price for the Company's residual load aggregate from earliest year available through most recent data available.

Request No. 1-28. Please provide all analysis conducted to determine future resource expansion and/or retirement. Provide calculations in operable format, with formulae intact, provide for every scenario, sensitivity, and year modeled, as well as definitions of all variables names.

Request No. 1-29. Please provide the following with regarding to all dispatch modeling, in machine-readable format, for every scenario, sensitivity and year modeled:

- a. All inputs
- b. All outputs
- c. All variable and parameter definition
- d. A user manual or the equivalent for the dispatch model used

Request No. 1-30. Has the Company done any analysis of the impacts of COVID-19 on its future load forecast? If so, provide that analysis. If not, why not.

Request No. 1-31. Please reference the Company's Rebuttal testimony of Eric H. Bell, in Dominion Energy South Carolina's 2019 IRP, Docket No. 2019-226-E, pages 14-15: "on February 19, 2020, a valve issue caused hydrogen to leak into the generator at Wateree Unit 2 which resulted in a fire that damaged the mid-section," which caused the Company to conduct a retire or replace study of Wateree 1 and 2 that evaluated multiple scenarios.

- a. Please provide the retire or replace studies referred to in this testimony and any subsequent updates to these retire or replace studies.
- b. Please provide all internal documentation, workpapers, and communications that occurred in regard to this process. This should include any Root cause analysis or other report associated with the isolation valve failure and hydro gas fire, consultant reports, estimates, reports to upper management, etc.
- c. Over the last 10 years, identify each time that the Wateree units were placed on Reserve Shutdown, how long and the reason for the shutdown.

Respectfully submitted this 2nd day of September, 2020.



on behalf of

Robert Guild
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(803) 917-5738
bguild@mindspring.com

**BEFORE
THE PUBLIC SERVICE COMMISSION OF
SOUTH CAROLINA
DOCKET NO. 2020-125-E**

In re:

Application of Dominion Energy South
Carolina, Incorporated for Adjustment
of Rates and Charges (See Commission
Order No.2020-313)

CERTIFICATE OF SERVICE

I hereby certify that I have served the persons listed on the official service list for Docket No. 2020-125-E, listed below, a copy of the Sierra Club's First Set of Data Requests via electronic mail on this day, September 2, 2020.

Alexander G. Shissias,
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On behalf of

Robert Guild